Chapter 7 quiz 4, November 21, 2011. 15 minutes.

Q1. A journal article gave the following summary info for fracture strengths (MPa) of $n = 169$ ceramic bars fired in a particular kiln: $\overline{x} = 89.10$, $s = 3.73$. Calculate a confidence interval for true average fracture strength using a confidence level of 95%.

Q2. A sample of 16 joint specimens of a particular type gave a sample mean proportional limit stress of 8.48 MPa and a sample standard deviation of .79 MPa. Calculate and interpret a 95% confidence interval for the true average proportional limit stress of all such joints. What, if any, assumptions did you make about the distribution of proportional limit stress?